



Review Article

Job satisfaction in midwives working in labour ward: A systematic review with meta-analysis[☆]

Marta Pérez-Castejón^{a,b}, María Suárez-Cortés^{b,c,d}, Ismael Jiménez-Ruiz^{d,e,*}, José Antonio Jiménez-Barbero^{d,e}

^a Programa de Doctorado en Ciencias de la Salud, Escuela Internacional de Doctorado, Universidad de Murcia, El Palmar, Murcia, Spain

^b Servicio Murciano de Salud, Murcia, Spain

^c Unidad Docente Multiprofesional de Obstetricia y Ginecología, Murcia, Spain

^d Departamento de Enfermería, Facultad de Enfermería, Universidad de Murcia, El Palmar, Murcia, Spain

^e Grupo de Investigación: Cuidados Avanzados en Enfermería, Instituto Murciano de Investigación Biosanitaria, Virgen de la Arrixaca, Spain

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ABSTRACT

Problem: There is little documented evidence of job satisfaction in midwives who work in birthing rooms.

Background: Job satisfaction in midwives who work in birthing rooms may have changed in recent decades due to the medicalization of maternal health.

Aim: To analyse job satisfaction levels among midwives working in birthing rooms.

Methods: We searched Web of Science, SCOPUS, MEDLINE, CUIDEN and CINAHL for observational and mixed method studies. The literature search was carried out from September to October 2022.

Findings: A total of 13 studies were included in the systematic review. A meta-analysis of the variable “midwives’ job satisfaction” was performed on 12 of the studies. Midwives rated their job satisfaction positively: DME, CI (95%) = 1.24 [0.78, 1.69]. Subgroup 1: DME, CI (95%) = 2.41 [2.05, 2.76]; Subgroup 2: DME, CI (95%) = 0.76 [0.65, 0.86]; subgroup 3: DME, CI (95%) = 1.11 [0.95, 1.27]; subgroup 4: DME, CI (95%) = 0.10 [-0.11, 0.31].

Discussion: Although midwives show high levels of satisfaction, the heterogeneity of instruments, lack of specificity and limited number of studies found restrict the outcomes.

Conclusion: There are no specific measurement instruments for assessing job satisfaction among midwives working in labour wards, so it is possible that these data do not correspond to reality as they do not take into account specific professional aspects within this field of practice.

Statement of significance

Problem or issue

The medicalization of childbirth could be affecting job satisfaction in midwives and, therefore, the quality of perinatal health care

What is already known

Job satisfaction among midwives is influenced by work shifts, workloads, salary, relationships with colleagues and work experience, being more satisfied when they work in primary care or birthing centers

than in hospitals

What this paper adds

Job satisfaction levels in midwives are lower in those who work in hospitals than those working in birth centers and may have been related with the increasing medicalization of the childbirth process, high interventionism and the presence of obstetric violence

Introduction

Job satisfaction among midwives is an increasingly important issue

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* Corresponding author at: Department of Nursing, Faculty of Nursing, University of Murcia, Edificio Departamental, Avda. Buenavista n°32, 30120 El Palmar, Spain.

E-mail address: ismael.jimenez@um.es (I. Jiménez-Ruiz).

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because of its relationship to the safety and quality of care provided to women in labour and their newborns, especially in the hospital setting (Şahan, 2021). Recent decades have seen the work of these professionals constrained by the medicalisation of maternal health, which has increased workload and led to a decline in woman-centred care (Perera et al., 2018). These changes have gradually altered the scope of midwives' activities and their ability to practise their profession with complete autonomy and advocate for a woman's right to a normal birth. Such a climate leads to midwifery leaving the workforce in hospital settings, and it is therefore vital to understand the factors that contribute to this level of satisfaction in order to take action to address them (Jefford et al., 2018; Wangler et al., 2022; Mharapara et al., 2021).

Occupational well-being in labour wards can be influenced by a number of factors. These include workload, working environment, salary, staffing shortages, the physical demands of the job, excessive paperwork, work-family imbalance, inadequate support from managers and a lack of autonomy. This final issue is closely related to the skills involved in the profession (Nedvěďová et al., 2017; Bloxsome et al., 2019).

Midwives derive well-being from establishing good working relationships with colleagues, feeling supported by their leaders, being able to develop trust-based relationships with the women they care for and feeling "passionate" about doing the work they do (Bloxsome et al., 2019). Workplace motivation is another related factor in developing and maintaining an adequate level of job satisfaction. This, together with job autonomy, is linked to the types of technical skills used during labour and birth, leading to the empowerment and professional recognition of midwives (Mharapara et al., 2021). Failure to achieve these conditions in the workplace can lead to physical and mental problems, reduced performance, job dissatisfaction, unhappiness, fatigue, despair and exhaustion, as well as burnout (Nedvěďová et al., 2017).

Burnout is a major concern within the healthcare system as workers are exposed to a highly mentally and emotionally charged atmosphere. This syndrome seems to be closely related to the sense of well-being in one's job, as well as to overall satisfaction in life (Uchmanowicz et al., 2019). There is also a high prevalence of burnout when health professionals do not receive recognition for the work they do, which can undermine their commitment to the care they provide (Suleiman-Martos et al., 2020). In the case of midwives, some studies (Paul et al., 2022; Matthews et al., 2022) show that the prevalence of this issue is between 40-50% and that it is associated with other mental health conditions, such as depression or anxiety (Creedy et al., 2017).

Despite worldwide research into midwives' job satisfaction, previous systematic reviews focused on identifying the factors determining job satisfaction among midwives across all areas of work throughout working conditions, socio-demographic characteristics, burnout, stress and workload in general, ignoring the specific differences between midwives in labour ward such as the lack of job recognition, the high demand for care or role conflicts with other maternity care professionals (Mharapara et al., 2021). These reviews included a reduced number of studies ((Matthews et al., 2022) and (Mharapara et al., 2021)) where published in 2017 and 2019 and limitations revealed that studies mainly compare the satisfaction of midwives with other healthcare professionals, but do not specifically analyse this variable independently. The also did not include articles published in a language other than English. The also identify that there is an abundance of literature focussing on why midwives leave the profession, but the gap exists in why they show high levels of job satisfaction if they are leaving and the reasons why midwives stay (Bloxsome et al., 2019; Nedvěďová et al., 2017).

In the same way, some of studies whose objective was to evaluate levels of midwives job satisfaction were carried out with tools that are not specific to the work of midwives in labour ward, such as *Minnesota Satsfaction Questionnaire* or a 5-item scale developed by Brayfield and Rothe (1951). Furthermore, these articles have not been carried out specifically with midwives who work in birthing rooms, but with all

midwives in general or including nurses (Uchmanowicz et al., 2019) as well as there are measurements of other factors of job satisfaction with other separate instruments such as autonomy or empowerment (Mharapara et al., 2021). Similarly, some authors (Oliver and Geraghty, 2022) are developing tools to assess satisfaction in midwives, but their validation is being conducted with midwives in all work settings without considering obstetric interventionism and low-intervention environment (Wangler et al., 2023). Therefore, it is possible that the job satisfaction of midwives is not being measured realistically, since these articles show moderate to high levels of job satisfaction, yet there is evidence that midwives actually experience high levels of burnout and professional abdication. Jefford et al. (2018) carried out an integrative review to show how midwifery abdication occurs and it might be related to midwives' professional identity, environmental hierarchy, culture of social obedience and lack of autonomy. This leads us to believe that any scale measuring job satisfaction of midwives should include areas related to autonomy and professional independence, among others (Kim and Kang, 2020).

In the same way, there are some instruments developed to measure job satisfaction in midwives in general, such as 'The Midwifery Process Questionnaire (MPQ) (Turnbull et al., 1995). Despite being a scale used by some articles to measure the job satisfaction of midwives working in birth rooms, the areas of this scale are four: professional satisfaction, professional support, client interaction, and professional development, that could be common to the entire body of midwifery such as primary care (Matthews et al., 2022; Grylka-Baesclin et al., 2022). In addition to the above, the satisfaction of professionals attending births should encompass work environment, professional recognition, multidisciplinary teamwork, compassion fatigue, low-intervention physical environments and the conduct of multidisciplinary clinical sessions (Matthews et al., 2022; Hansson et al., 2022; Alnuaimi et al., 2020; Khavayet et al., 2018; Qu et al., 2022).

Hence, study, carried out in accordance with the PRISMA recommendations (Urrútia and Bonfill, 2010), aims to answer the following question: "What is the level of job satisfaction among midwives attending births?"

For this reason, our study's main objective is to analyse job satisfaction levels among midwives working in birthing rooms as well as to identify the various instruments currently used to measure these satisfaction levels.

Methodology

A systematic literature review was conducted during September and October 2022, in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement publication guidelines (Urrútia and Bonfill, 2010). The review protocol was registered in PROSPERO (International Prospective Register of Systematic Reviews) with registration code CRD42022333509 (https://www.crd.york.ac.uk/prospERO/display_record.php?RecordID=333509).

Search strategy

A systematic literature search was conducted using the Web of Science (WOS), SCOPUS, MEDLINE (accessed through PubMed), CUIDEN and CINAHL databases. WOS and CINAHL were last accessed on 11 October 2022 and PUBMED, CUIDEN and SCOPUS on 29 September 2022. The search strings included the following keywords: (midwifery OR nurse midwives) AND (humanizing delivery OR type of delivery) AND (technocratic model of birth OR medicalization of birth) AND (job satisfaction OR motivation OR personal autonomy OR professional autonomy) NOT (patient satisfaction OR maternal satisfaction). The full search strategy is shown in Annex 1.

Inclusion and exclusion criteria

Inclusion criteria were as follows: (a) language: no restrictions were set; (b) date of article publication: articles published between 2018–2022; (c) methodology: observational and mixed method studies; (d) aim of the study: to analyse midwives' job satisfaction; and (e) study population: practising midwives working in labour rooms.

Articles were excluded if: (a) the majority of the sample was not made up of midwives working in labour rooms, or the results were not stratified by area of work; and (b) they looked at burnout rather than job satisfaction.

Selection of articles

The first and second authors independently screened the titles and abstracts of potentially eligible studies and made a shortlist of the articles. These two authors then read the full text of the previously short-listed articles and selected those that met the specified inclusion criteria. Discrepancies were resolved with the assistance of a third reviewer.

Risk of bias analysis

The selected studies were independently assessed for risk of bias by the first and second authors. The STROBE checklist for observational studies was used to assess the methodological quality of each study (Von Elm et al., 2022).

To be included in the review, studies each had to meet 50% of the 22 STROBE items. One point was awarded for each item that the article fulfilled. If it was partially fulfilled, 0.5 points were awarded and if it was not fulfilled, no points were awarded. In cases of disagreement between the first and second author, a third reviewer was consulted. Inter-rater reliability was assessed by intraclass correlation (ICC) analysis.

Finally, an analysis of publication bias was performed to check whether publication bias could be a threat to the validity of the results of the meta-analysis.

Tabulation and data extraction

The following data were extracted from each article and tabulated: authorship and year of publication, study title, study type, objective(s), sample size, age, measurement instrument used and main outcome. In the event that the necessary data were not available, they were requested from the author of the article. Data extraction and recording were performed independently by the first and second authors. Any discrepancies between these two reviewers were resolved by a third reviewer.

Data analysis

Studies were included in the meta-analysis if they provided data on mean and standard deviation, confidence interval or other data that allowed their effect size to be estimated. The generic inverse-variance method with random-effects models was used to combine the findings of studies assessing midwives' job satisfaction. As the studies used different methods to measure job satisfaction, we standardised the data on a common scale so that they could be grouped together. We used means, SDs and sample size to estimate the standardised mean difference (SMD) for each study.

Sensitivity analysis was performed to determine how each study affected the overall effect estimate. For each comparison, the heterogeneity of the results was assessed using the chi-square test at the .05 level of significance and the I² index was also calculated. For cases where heterogeneity was significant, a subgroup analysis was carried out. Finally, an analysis of publication bias was performed to check whether publication bias could be a threat to the validity of the results of

the meta-analysis. RevMan 5.4 was used for the calculations (ReviewManager (RevMan) [Computer program] 2020).

A narrative synthesis of the included studies was then carried out, using the outcome measure "midwives' job satisfaction". The main characteristics and results of these were compiled in an *ad-hoc* table.

Results

Studies included in the systematic review

In total, 2,854 studies were found: 927 in Web of Science, 610 in MEDLINE, 816 in SCOPUS, 490 in CINAHL and 11 in CUIDEN.

After screening the titles and abstracts, we excluded 1,854 studies because they did not match the study objectives and 980 duplicate articles, leaving 20 studies remaining. In the second phase, seven articles were excluded after full-text reading for not meeting the inclusion criteria. The remaining 13 articles exceeded the agreed threshold for the risk of bias analysis and thus were ultimately included in the systematic review (Fig. 1).

The intraclass correlation interval (ICC) showed high inter-rater reliability (ICC = 0.82, $p < .05$).

Characteristics of the studies included

The studies included were published between 2018 and 2022. The participants were midwives working in labour and birthing rooms. The minimum and maximum sample sizes were 35 and 1,747 people, respectively. The studies included used different instruments to measure job satisfaction and the total sample analysed consisted of 3,944 midwives working in birthing rooms (Table 1).

Characteristics of the scales included in the review

Finally, none of the instruments found in the analysed articles specifically evaluate job satisfaction among midwives in labour ward. Articles analysed in this meta-analysis use scales validated in general employed population (Hansson et al., 2022; Khavayet et al., 2018; Jasiński et al., 2021; Arefi et al., 2020; Wiegers et al., 2018; Alarcón Henríquez et al., 2020; Cronie et al., 2019). This is the case of the instruments: Herzberh's job satisfaction questionnaire, Satisfaction with job scale, labor SL-SPC, Job satisfaction inventory, The Leiden quality of work questionnaire and Copenhagen psychosocial Questionnaire. Characteristics are specified in Table 1.

On the other hand, some of studies included (Oliver and Geraghty, 2022; Kim and Kang, 2020; Alnuaimi et al., 2020) use tools that are validated in nursing field, such as MMSS, The nursing workplace satisfaction questionnaire and Attitude scale to measure occupational satisfaction of hospital nurses (Table 1). Therefore, there are aspects of the midwifery field that are not taken into account as discussed before.

At last, we identified three studies that used tools validated in midwives in any work setting (Grylka-Baeschlin et al., 2022; Jung and Jeong, 2020; Matthews et al., 2022): MPQ and a tool composed of 20 items to measure job satisfaction in midwives (Table 1). Despite its specificity in midwifery, there are aspects of work in birth suites that are not covered.

Studies included in the meta-analysis

A meta-analysis of the variable "midwives' job satisfaction" was performed on 12 of the previously selected studies (Oliver and Geraghty, 2022; Kim and Kang, 2020; Matthews et al., 2022; Grylka-Baeschlin et al., 2022; Hansson et al., 2022; Alnuaimi et al., 2020; Khavayet et al., 2018; Jasiński et al., 2021; Arefi et al., 2020; Wiegers et al., 2018; Jung and Jeong, 2020; Cronie et al., 2019) to obtain an estimate of the mean effect size for a confidence interval of 95%. For the heterogeneity analysis, the values of χ^2 and the I² index were estimated. The study by

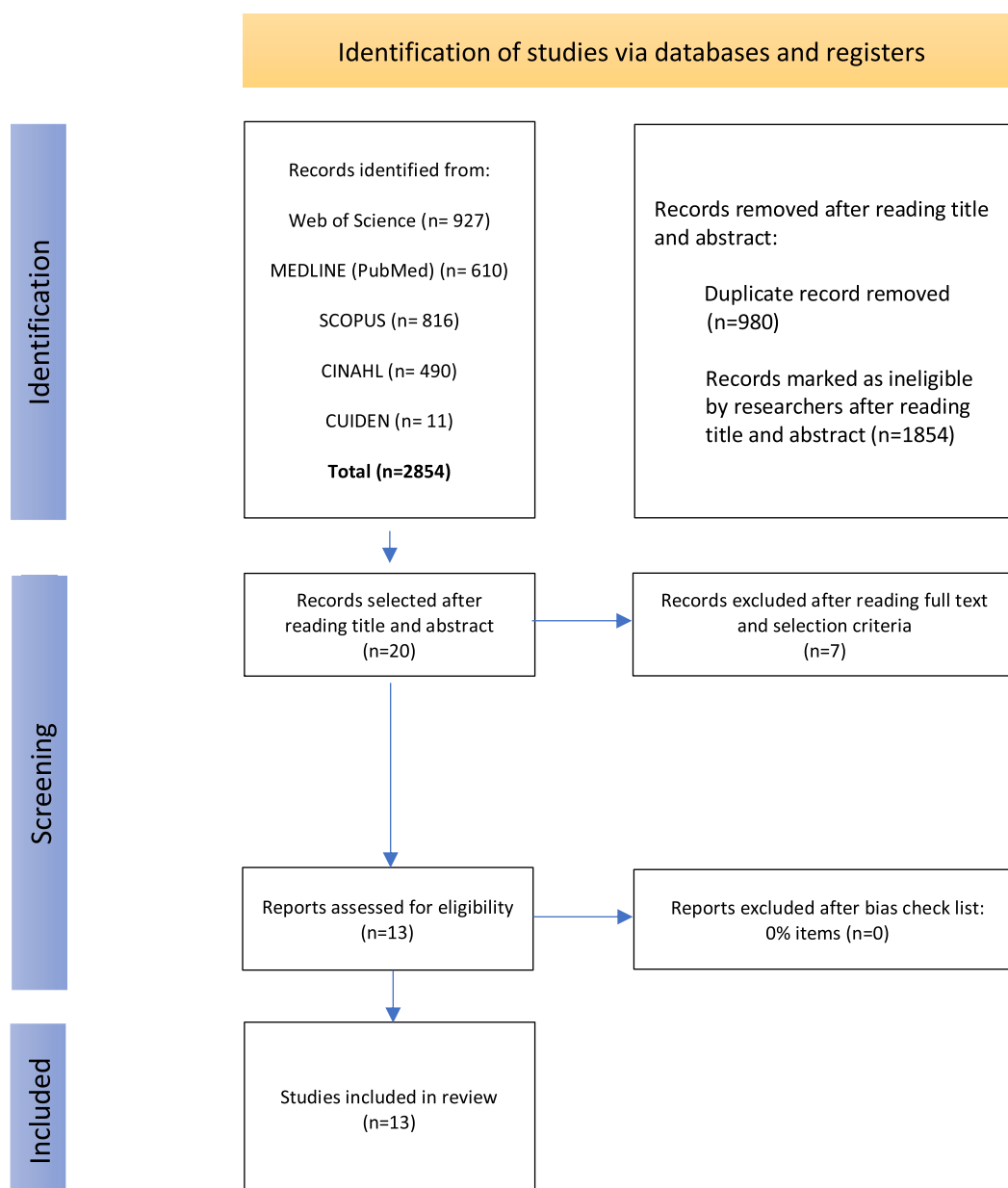


Fig. 1. Flow diagram.

Fig. 1. Flow diagram of the selection criteria according to the preferred reporting items for systematic reviews and meta-analysis statement guidelines.

Alarcón Henríquez et al. (2020) was excluded from the meta-analysis because it did not provide the necessary data to calculate its effect size, nor was the data submitted when requested.

Data were available on 3,912 midwives included in 12 full cross-sectional studies measuring this variable. Sensitivity analysis showed that no study significantly affected the overall effect size, which indicates that midwives rated their job satisfaction positively: DME, CI (95%) = 1.24 [0.78, 1.69] (Fig. 2).

However, the analysis showed heterogeneity to be significant ($\chi^2 = 791.00$, $p = .00001$; $I^2 = 99\%$), so a subgroup analysis was performed based on the specific topics covered by the studies, leading to the establishment of four subgroups (Fig. 3). The themes by which the studies were grouped were: the workplace (Subgroup 1), working conditions (Subgroup 2), client interaction (Subgroup 3) and workloads (Subgroup 4).

The first subgroup, which included three studies (Kim and Kang, 2020; Wiegers et al., 2018; Cronie et al., 2019), (N = 1,160), showed the largest mean effect size: DME, CI (95%) = 2.41 [2.05, 2.76], and the

analysis showed moderate homogeneity between studies ($\chi^2 = 5.61$, $p = .06$; $I^2 = 64\%$). The second subgroup (Hansson et al., 2022; Alnuaimi et al., 2020; Khavayet et al., 2018; Arefi et al., 2020) (N = 2,410) continued the trend observed in the previous analyses, but the mean effect size was small (DME, CI (95%) = 0.76 [0.65, 0.86]) and the heterogeneity analysis was not significant ($\chi^2 = 5.52$, $p = .14$; $I^2 = 46\%$). Finally, there were two other subgroups that included only two studies: Subgroup 3 (Grylka-Baeschlin et al., 2022; Matthews et al., 2022), (N = 345, DME, CI (95%) = 1.11 [0.95, 1.27]); and Subgroup 4 (Oliver and Geraghty, 2022; Jasiński et al., 2021), which yielded a non-significant mean effect size (N = 177, DME, CI (95%) = 0.10 [-0.11, 0.31]). There were also significant differences between the four subgroups ($\chi^2 = 140.39$, $p < .00001$; $I^2 = 97.2\%$).

Finally, a funnel plot was performed, showing a symmetrical distribution between the studies. This would suggest that there is no evidence of possible publication bias that would interfere with the interpretation of the effect sizes found (Fig. 4).

Table 1
Characteristics of included studies.

Author	Title	Type of study	Objective(s)	Sample	Age [years] Age [years]	Instrument	Aim of the instrument	Reliability	Measurement	Results
(Khavayet et al., 2018) Iran	A survey of job satisfaction among midwives working in hospitals	Cross-sectional	To assess job satisfaction among midwives working in maternity hospitals affiliated to Abadan Faculty of Medical Sciences, Abadan, Iran.	100	(M ± SD) = 35.37 ± 7.3	Herzberh's Job Satisfaction Questionnaire	To evaluate employee's job satisfaction based on Herzberg's Two-Factor Theory	0,92	M ± SD	The mean job satisfaction score of the midwives was 302.41±19, indicating moderate satisfaction
(Jasinski et al., 2021) Poland	Workload, job satisfaction and occupational stress in polish midwives before and during the Covid-19 pandemic	Cross-lagged	To describe, explain and compare the correlations between workload, job satisfaction and job stress levels in Polish midwives working before and during the COVID-19 pandemic.	133	(M ± SD) = 40.8 ± 12.42	Satisfaction with job scale	To measure the cognitive aspects of job satisfaction	0,864	M ± SD	The level of job satisfaction among midwives working before the COVID-19 pandemic was moderate (M=21.63, SD=6.07).
(Matthews et al., 2021). Australia	Factors associated with midwives' job satisfaction and experience of work: a cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia.	Cross-sectional	To explore the factors affecting Australian midwives' job satisfaction and work experience.	302	N (%) <25 = 44 (15) 26-35 = 118 (40.3) 36 - 50 = 73 (24.9) >51 = 58 (19.8)	Midwifery Process Questionnaire (MPQ)	To examine midwives' views of their professional role	Not available	M ± SD	The majority rated job satisfaction positively (85%). The mean for the Professional Satisfaction domain was 0.61 (SD 0.56).
(Alarcón-Henríquez et al., 2020). Chile	[Job satisfaction and motivation in obstetric professionals of a Chilean hospital.]	Cross-sectional	To determine the level of job satisfaction and motivation of midwifery professionals at the Puerto Montt Hospital, Chile.	32	25 - 35 = 57% 36 - 45 = 20% 46 or more = 23%.	Labor satisfaction scale of Sonia Palma Carrillo (SL-SPC)	To measure job satisfaction through four dimensions: task significance, working conditions, personal and/or social recognition and economic benefits	0,82		Overall satisfaction was high in 23% (8) of the sample, medium in 57% (20) and low in 20% (7).
(Jung et al., 2020) Korea	Work performance and calling as factors influencing job satisfaction among nurse midwives working in the delivery room	Cross-sectional	To find out the effect of job performance and vocation on the job satisfaction of midwives working in the delivery room.	149	N (%) ≤ 39 = 45 (30.2) 40 - 49 = 70 (47.0) >50 = 34 (22.8)	A tool composed of 20 items with 5 categories such as professional knowledge, food service, remuneration, work environment and work supervision.	To measure job satisfaction in midwives	0,88		Satisfaction of midwives accompanying births: Mean± DE=3.46±0.50
(Grylka-Baeschlin et al., 2022). Switzerland	Job satisfaction of midwives working in a labor ward: A repeat measure mixed-methods study.	Prospective longitudinal observational study	To assess job satisfaction before and after the implementation of a debriefing project.	43	Median (range) = 33.5 (25-64)	Midwifery Process Questionnaire (MPQ)	To ascertain midwives' views of their professional role	0,92	M ± SD	The mean of the "Professional satisfaction subscale" was 0.77 (SD=0.59) before the implementation of the information sessions (t0) (n=35). Mean satisfaction. Mean job satisfaction was 193.77 (SD=55.14).
(Arefi et al., 2020) Iran	Examining Job Satisfaction, Mental Workload, and Job	Cross-sectional	To examine the relationship between job satisfaction, mental workload and job	150	Mean ±SD 34.01 ± 6.02	Job satisfaction inventory (JDI)	To measure job satisfaction through different variables like payment, promotion	0,7	M ± SD	

(continued on next page)

Table 1 (continued)

Author	Title	Type of study	Objective(s)	Sample	Age [years] Age [years]	Instrument	Aim of the instrument	Reliability	Measurement	Results
	Control in Midwives working in hospital		control in hospital midwives.				opportunities, supervisor, colleagues, work environment factors (supervisors' style, strategies, procedures, work team attachment, work condition and benefits)			
(Cronie et al., 2019) Netherlands	Are midwives in the Netherlands satisfied with their jobs? a systematic examination of satisfaction levels among hospital and primary-care midwives in the Netherlands	Cross-sectional	To measure and compare job satisfaction among hospital-based and primary care midwives in the The Netherlands.	103	Mean (±SD) = 42 (9.8)	The Leiden quality of work questionnaire (LQWLQ)	To measures the key components of the Job Demand- Control- Support model, namely, psychological demands, slull discretion, decision authority, and social support from supervisor and coworker	0,805	M ± SD	Hospital midwives showed a mean satisfaction of 3.07 (SD=0.48) which means that they are very satisfied.
(Hansson et al., 2022). Sweden	Job satisfaction in midwives and its association with organisational and psychosocial factors at work: a nation-wide, cross-sectional study	Cross-sectional	The main objective of this study was to identify organisational and psychosocial factors associated with job satisfaction in midwives.	1747	Mean (±SD) = 48 (10.44)	Copenhagen Psychosocial Questionnaire (COPSOQ) III)	To assess the organizational and psychosocial work environment	0.89	M ± SD	Midwives in Sweden show high levels of job satisfaction (mean 64.2, SD=19.1).
(Alnuaimi et al., 2020) Jordan	Job satisfaction, work environment and intent to stay of Jordanian midwives	Cross-sectional	The objectives were: 1. To assess levels of job satisfaction, intention to remain in the job and working environment. 2. To examine the relationship between work climate and the intention to stay, and the level of job satisfaction of those working in hospitals and maternal and child health centres. 3. To examine the relationships between job satisfaction and selected demographic variables.	413	N (%) <25 = 37 (9) 25-34 = 242 (58.6) 35-44 = 122 (29.5) 45-54 = 12 (2.9)	McCloskey Mueller Satisfaction Scale (MMSS)	To measure nurses' job satisfaction	0.92	M ± SD	The level of job satisfaction of the registered midwives was medium, with a Mean = 3.03, SD = 0.60 on the 5-point scale, which is neither satisfied nor dissatisfied.
(Oliver et al., 2022) Australia	A mixed-methods pilot study exploring midwives' job satisfaction: is being of service to women the key?	Mixed methods (Quan + Cual)	To investigate the job satisfaction of midwives in maternity care settings by asking the question "What is the job satisfaction of midwives in maternity care services in Australia?" and using the previously	44	48.8	The nursing Workplace satisfaction questionnaire	To measure job satisfaction among hospital nurses	0.90	M ± SD	35 participants show a Mean=2.43 (SD=0.73) on the question "My job gives me a lot of satisfaction", which shows that they are satisfied.

(continued on next page)

Table 1 (continued)

Author	Title	Type of study	Objective(s)	Sample	Age [years] Age [years]	Instrument	Aim of the instrument	Reliability	Measurement	Results
(Kim et al., 2020) Korea	Comparison of professionalism and job satisfaction between Korean midwives in birthing centres and midwives in hospitals	Cross-sectional	validated Nursing Workplace Satisfaction Questionnaire as a tool to collect data for the study. 1. Investigating the characteristics of MWBC and MWH 2. Identify professionalism and job satisfaction according to the characteristics of MWBC and MWH. 3. Comparing professionalism and job satisfaction between MWBC and MWH 4. Identify the relationship between professionalism and job satisfaction.	19	N (%) 20 - 29 = 0 (0.0) 30 - 39 = 5 (26.3) 40 - 49 = 1 (5.3) 50 - 59 = 7 (36.8) ≥ 60 (31.6)	Attitude Scale to Measure Occupational Satisfaction of Hospital Nurses	To measure job satisfaction among hospital nurses	0.77	M ± SD	Mean± SD=3.52±0.28
(Wiegers et al., 2018). Netherlands	Job satisfaction of maternity care providers in the Netherlands: Does working in or with a birth centre influence job satisfaction?	Cross-sectional	Research questions: - Is there a difference in the job satisfaction of caregivers who work regularly or occasionally in a maternity facility compared to those who work alone in other settings? - How do those who work in a maternity centre evaluate the workplace?	742	Average (years) = 47.4	The Leiden Quality of Work Questionnaire	To measures the key components of the Job Demand- Control- Support model, namely, psychological demands, skill discretion, decision authority, and social support from supervisor and coworker	0,805	M ± SD	Maternity care assistants working in birth centres show a high score of job satisfaction (3.12)

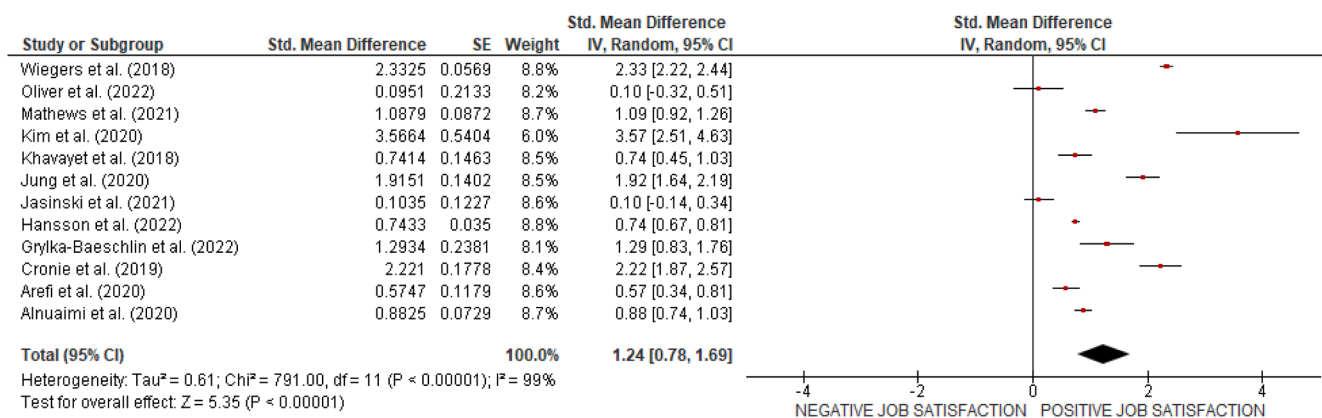


Fig. 2. Meta-analysis of included studies.

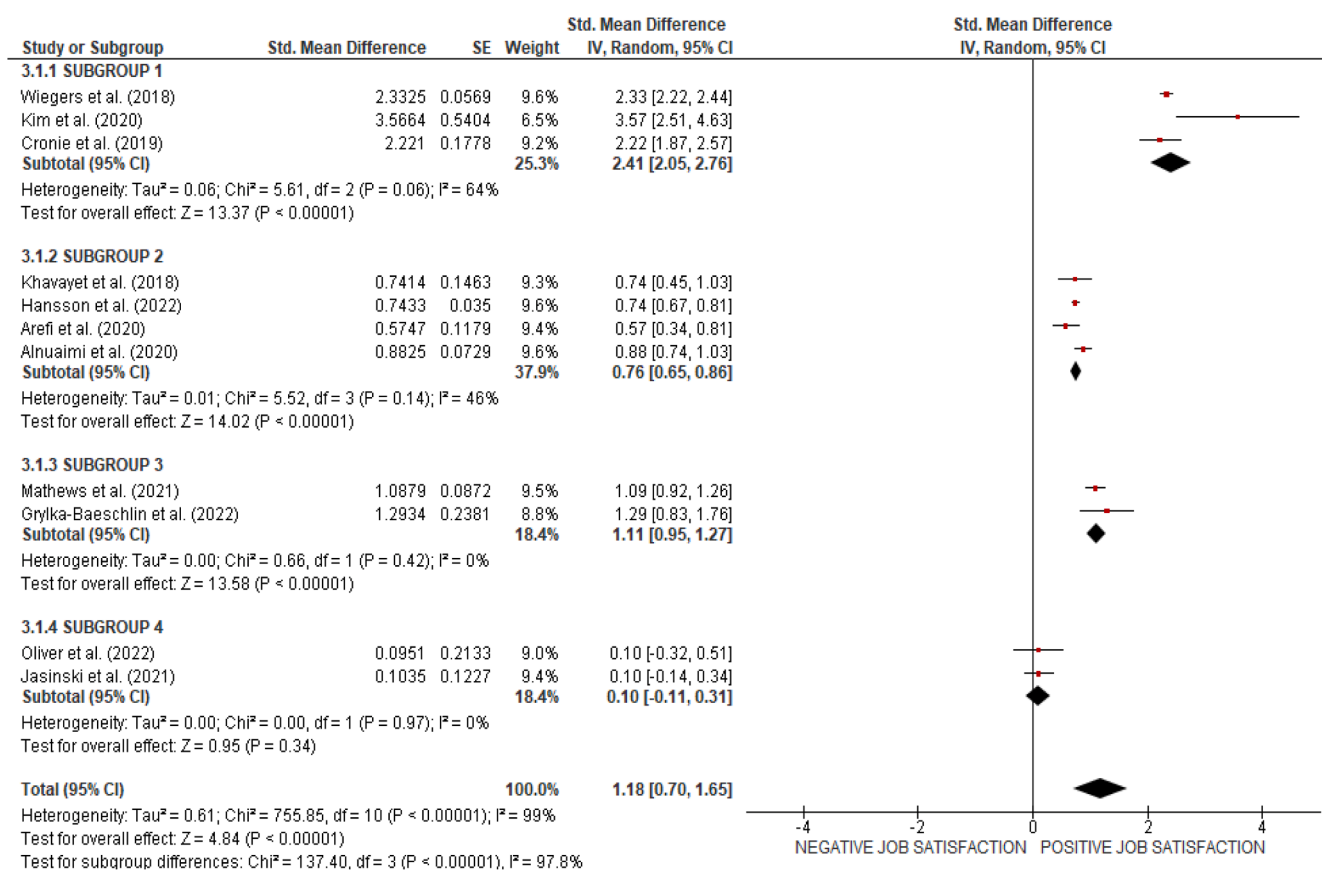


Fig. 3. Subgroup analysis.

Subgroup 1: place of work (birth centre, hospital and primary care) and job satisfaction

Subgroup 2: work environment and job satisfaction

Subgroup 3: client interaction and job satisfaction

Subgroup 4: workload and job satisfaction

Narrative synthesis

Job satisfaction and the workplace

The first subgroup included three studies (Kim and Kang, 2020; Wiegiers et al., 2018; Cronie et al., 2019) that compared midwives' job satisfaction levels depending on their place of work (birth centre, hospital or primary care). Two articles, the study by Kim and Kang (2020) and Wiegiers et al. (2018) analysed the job satisfaction of midwives working in hospitals and birthing centres. Both studies show that professionals working in birthing centres reported higher levels of job

satisfaction than those working in hospitals, as well as a greater degree of autonomy and professionalism in their work. Similarly, Cronie et al. (2019) found that hospital midwives reported slightly lower levels of job satisfaction than primary care (PC) midwives. These results are similar to those found in the study by Jung and Jeong (2020), excluded from the subgroup analysis because of high heterogeneity, which measured the job satisfaction of midwives in Korea. It was found that midwives whose work was associated with antepartum care had higher levels of job satisfaction than those who were involved in providing intrapartum or postpartum care.

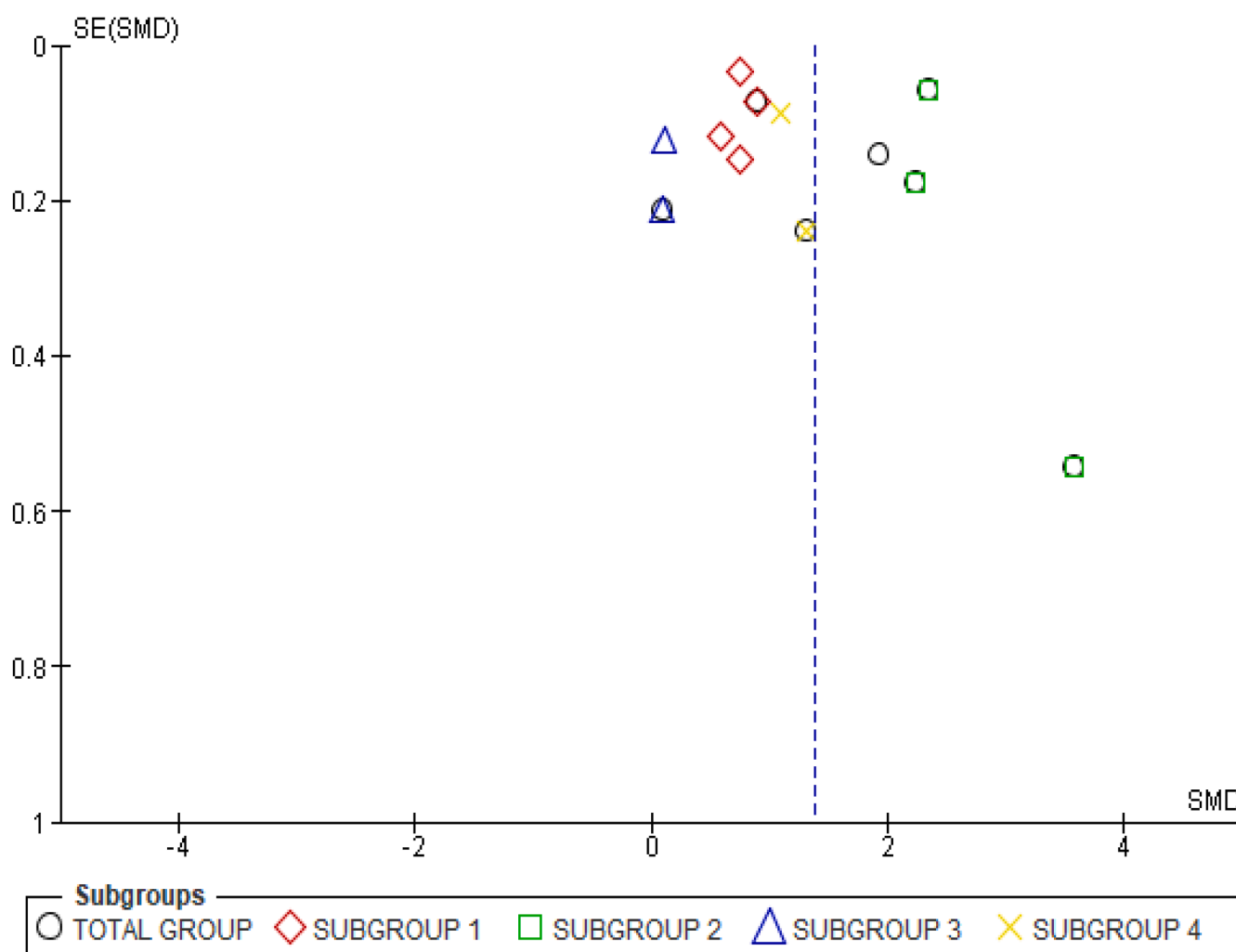


Fig. 4. Funnel plot.

Working conditions, experience and job satisfaction

The second subgroup consisted of four articles (Hansson et al., 2022; Alnuaimi et al., 2020; Khavayet et al., 2018; Arefi et al., 2020) representing a sample with a mean professional midwifery experience of more than 10 years (Hansson et al., 2022; Alnuaimi et al., 2020; Khavayet et al., 2018; Arefi et al., 2020). Moreover, these articles have in common the analysis of the influence of the work environment on the job satisfaction of midwives, both as an objective and secondarily. The study by Hansson et al. (2022) found that a faster work pace, role conflicts, burnout, higher emotional demands, lack of recognition and poor organisation were all adverse factors for job satisfaction. The study by Arefi et al. (2020) showed similar results, with good levels of job satisfaction (193.77 SD = 55.14) and a significant positive correlation between job satisfaction, mental workload and job control, as well as a high level of mental workload (M = 70.98 SD = 15.14). Similarly, the results of Alarcón Henríquez et al. (2020) showed medium-low satisfaction when the following dimensions were measured: physical and/or material conditions, employment benefits and remuneration, and job performance. However, studies by Alnuaimi et al. (2020) and Khavayet et al. (2018) showed medium levels of job satisfaction. The first found a significant positive correlation between job satisfaction, work environment and intent to stay in the profession, while the second found a significant positive correlation between experience in the job and satisfaction.

Client interaction and job satisfaction

The third subgroup included two studies (Grylka-Baeschlin et al., 2022; Matthews et al., 2022) that used the Midwifery Process Questionnaire to measure job satisfaction levels in their study population. The first article (Matthews et al., 2022) had a negative attitude with regard to their “professional support” and “client interaction”, which are areas for improvement. However, overall, 85% scored positively in terms of job satisfaction. They also indicated that one of the main factors affecting satisfaction was poor staffing levels during shifts, which increased workload and reduced the time available to care for women during childbirth. On the other hand, the second study (Grylka-Baeschlin et al., 2022) used quantitative and qualitative methods to assess the job satisfaction of midwives working in labour wards. This study found that introducing telephone calls to check on the status of mothers and newborns six weeks after birth enhances interaction with the women in their care, but have negative impacts on job satisfaction, professional support and professional development in an early phase. Some explanations for these findings were additional stress and higher workload.

Workload and job satisfaction

The fourth subgroup (Oliver and Geraghty, 2022; Jasiński et al., 2021), with a non-significant mean effect size, focused on assessing the relationship between workload and job satisfaction. Although no significant differences were found, the narrative of the included studies focused on satisfaction with midwives’ workloads in the birthing room

and so their results fall into this category. One study (Jasiński et al., 2021) described and compared the relationship between workloads, job satisfaction and stress levels before and during the COVID-19 pandemic. The findings showed that workload and occupational stress increased during the pandemic, with job satisfaction levels remaining similar both before and during COVID-19 ($M = 21.63$ and $M = 22.20$), reflecting medium-high levels of satisfaction. The second study (Oliver and Geraghty, 2022) had similar results and found that midwives reported poor job satisfaction due to a lack of opportunities to discuss clinical cases with colleagues, as well as not having enough time to properly support women in labour.

Discussion

Midwives play a crucial role in maternal and newborn health and enhancing their job satisfaction is essential to ensuring the quality of care they provide (García et al., 2022). The main objective of our study was therefore to use a systematic review to analyse job satisfaction levels among midwives working in birthing units, as well as to identify the different instruments currently used to quantify these satisfaction levels.

The meta-analysis conducted in this study showed high levels of job satisfaction among midwives involved in birth. These data are consistent with those obtained by Şahan (2021), who showed that all midwives had good levels of satisfaction, but that those providing care in PC centres had higher levels of satisfaction than those working in hospitals. This seems to be closely linked to the level of midwife autonomy (Şahan, 2021). Hospital-based midwives may find their caring duties are subject to doctors' orders, while those in birthing centres or in PC have greater autonomy and independence (Vermeulen et al., 2023; Kuipers et al., 2023). These results are also consistent with those found in the study by Mharapara et al. (2021), who confirmed that professional recognition, decision-making autonomy and empowerment were key factors in determining midwives' satisfaction with maternity care. In this regard, hospital-based midwives may have lower levels of job satisfaction compared to those in other healthcare settings because of greater awareness of and exposure to obstetric violence, as well as high levels of healthcare interventionism during labour (Martín-Badía et al., 2021). In Spain, the prevalence of this type of violence is estimated to be around 67.4%, according to a 2019 study by Martínez-Galiano et al., with physical violence being more common than verbal or psycho-affective violence (Martínez-Galiano et al., 2021). According to Fernández (2014) there is an urgent need to raise awareness of obstetric violence, as it causes deep emotional distress for midwives to witness such abusive situations, sometimes requiring a therapeutic response.

In terms of working conditions, the study by Şahan (2021) found that midwives working night shifts had lower levels of satisfaction than those working day shifts. Long working hours, as well as night and shift work, have a direct impact on healthcare workers' satisfaction and can be a risk factor for the onset of burnout (Velilla et al., 2022). Similarly, the systematic review by Rosa et al. (2019) showed that the circadian rhythm disturbance experienced by nurses working at night may increase the risk of anxiety, stress and depression.

Although our meta-analysis shows that midwives involved in labour have high levels of satisfaction, the cross-sectional study by Muluneh et al. (2022), which measured job satisfaction among midwives working in Ethiopian healthcare facilities, found that less than half of the participants were satisfied with their job (45%) and 39% of them had plans to leave their position. These findings reveal high dropout and burnout rates, as shown in the systematic review with meta-analysis by Suleiman-Martos et al. (2020). They noted that most of the studies analysed found moderate levels of burnout in midwives, with a prevalence of 40%.

Furthermore, some of the studies included in our review show that greater interaction with women in labour may be associated with higher levels of job satisfaction among midwives (Grylka-Baeschlin et al., 2022; Matthews et al., 2022). Although there is currently little evidence on this

relationship, greater interaction with the care recipient can improve the information they provide, as well as building a relationship of trust between both parties. This enhances the safety and quality of care and prevents burnout among caring professionals, as shown in the systematic review carried out by Jun et al. (2021).

Finally, our study found that there are no specific measurement instruments for assessing job satisfaction among midwives working in labour wards. However, a variety of job satisfaction scales have been used, some of which have been validated in the general working population (Hansson et al., 2022; Alnuaimi et al., 2020; Khavayet et al., 2018; Jasiński et al., 2021; Arefi et al., 2020; Wiegers et al., 2018; Cronie et al., 2019), others which have been used to quantify job satisfaction among healthcare workers but not specifically for midwives (Oliver and Geraghty, 2022; Kim and Kang, 2020) and some which have been validated for midwives but can be used in any healthcare setting (Grylka-Baeschlin et al., 2022; Matthews et al., 2022). Despite its specificity in midwifery, there are aspects of work in the birthing rooms that are not covered, such as the highly interventionist obstetric approach that limits midwives' competencies, professional recognition by the obstetric team or compassion fatigue towards women in environments with obstetric violence and exposure to these (Perera et al., 2018; Qu et al., 2022; Munabi-Babigumira et al., 2017; Prosen, 2022).

Study limitations

The main limitations we identified when extrapolating the results and performing a full meta-analysis are the lack of studies found and included in the systematic review and meta-analysis, the heterogeneity of the instruments used in these studies to measure midwives' job satisfaction, and the heterogeneity in the measurement of the outcome variable. Based on the conducted search, these are the few studies that analyse the tools used to measure midwives' job satisfaction from the specific perspective of their skills in the labour ward, highlighting the importance of evaluating aspects such as obstetric violence, empowerment, level of interventionism and professional autonomy and recognition.

Given the limitations identified in the present review, it would be worthwhile developing a measurement tool to gauge the job satisfaction of midwives providing care during birth. This would help to identify dissatisfaction more effectively, prevent burnout and ensure high quality maternal and neonatal care.

Future research should more closely analyse the relationship between obstetric violence and job dissatisfaction in order to identify the factors that need to be improved in this type of health care. One of the problems with research in this area is the difficulty of finding data on such institutional violence, as at present practitioners may feel uncomfortable collecting data and testimonies about it.

Conclusions

We note that there is currently no instrument that specifically measures job satisfaction among midwives providing care during childbirth. The measurement scales found cover general matters for any kind of healthcare professional or for the nursing profession as a whole. Although the meta-analysis shows moderate-high levels of job satisfaction among midwives, it is possible that these data do not correspond to reality as they do not take into account specific professional categories within this field of practice. Research into this phenomenon is therefore essential for the well-being of professionals, women and newborns. This should lead to the development of an instrument that encompasses all the issues specific to the professionals involved in birth.

Author agreement

Ismael Jiménez Ruiz, with Spanish National Identification Document number 48655610F, as representative of the rest of the researchers,

guarantees:

- The precision, transparency and honesty of the data and information contained in the article.
- All authors participated in the critical review of this study until the final version sent for publication.
- All possible discrepancies have been discussed, resolved and described in an appropriate manner.
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- None of the authors has presented or presents a conflict of interest to declare.
- Likewise, there is no conflict of interest to be declared by any of the authors' relatives.

We hope that you find this manuscript interesting and deem it appropriate for publication in your journal. We would like to thank you in advance for taking the time to consider our work.

CRediT authorship contribution statement

Marta Pérez-Castejón: Formal analysis, Funding acquisition, Investigation, Validation, Visualization, Writing – original draft, Writing – review & editing. **María Suárez-Cortés:** Conceptualization, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing. **Ismael Jiménez-Ruiz:** Conceptualization, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **José Antonio Jiménez-Barbero:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Validation, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no potential conflict of interest in the research, authorship and/or publication of this article.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.midw.2024.104112](https://doi.org/10.1016/j.midw.2024.104112).

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